SOUTHERN CALIFORNIA

ASSOCIATION of GOVERNMENTS

Main Office

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Los Angeles, California

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Doc# 101061 v4

MEETING OF THE

ENERGY & ENVIRONMENT COMMITTEE

Thursday, October 7, 2004
10:30 a.m. – 12:15 p.m.

SCAG Offices
818 W. 7th Street, 12th Floor
Riverside A Conference Room
Los Angeles, California 90017
213. 236.1800

Agenda & Map Enclosed

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Lisa Taylor at 213.236.1891 or taylorl@scag.ca.gov

Agendas and Minutes for the Energy and Environment Committee are also available at:

www.scag.ca.gov/committees/eec.htm

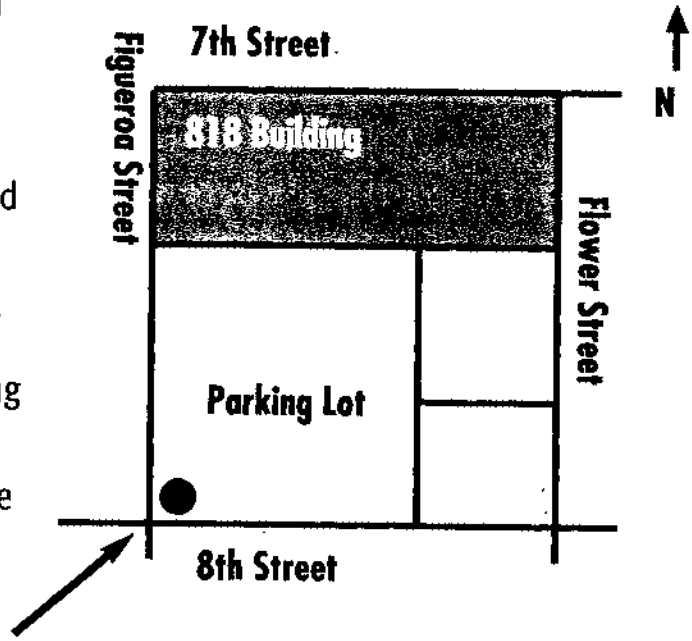
SCAG, in accordance with the Americans with Disabilities Act (ADA), will accommodate persons who require a modification of accommodation in order to participate in this meeting. If you require such assistance, please contact SCAG at (213) 236-1868 at least 72 hours in advance of the meeting to enable SCAG to make reasonable arrangements. To request documents related to this document in an alternative format, please contact (213) 236-1868.

Emergency Evacuation Procedures:

1) SCAG offices will always totally evacuate when an alarm sounds, even if it is thought to be a false alarm.

2) The evacuation stairwells are shown below and on the maps on the back side of this flyer. The preferred evacuation stairwells are #2 and #3.

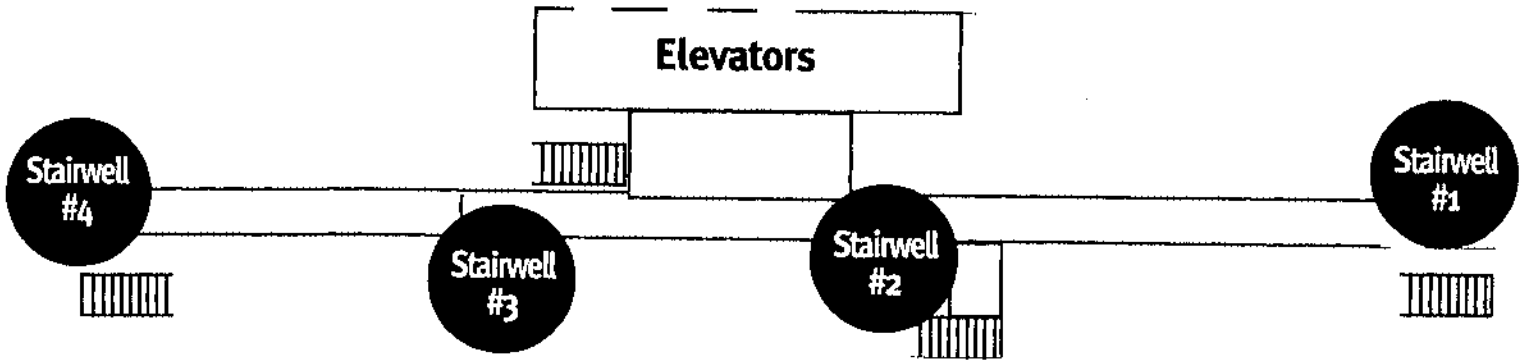
3) Take the stairs to the ground floor. Upon exiting the building walk to the corner of 8th and Figueroa and meet at the Northeast corner. See dot in the map to the right. Do not leave the area without making contact with a floor warden, who will be wearing an orange vest.



4) SCAG safety officers will be wearing an orange vest during an emergency. Please follow their instructions.

Note that only stairwell #3 goes to the roof. Do not evacuate to the roof unless instructed to by Floor Wardens or Fire Department Personnel.

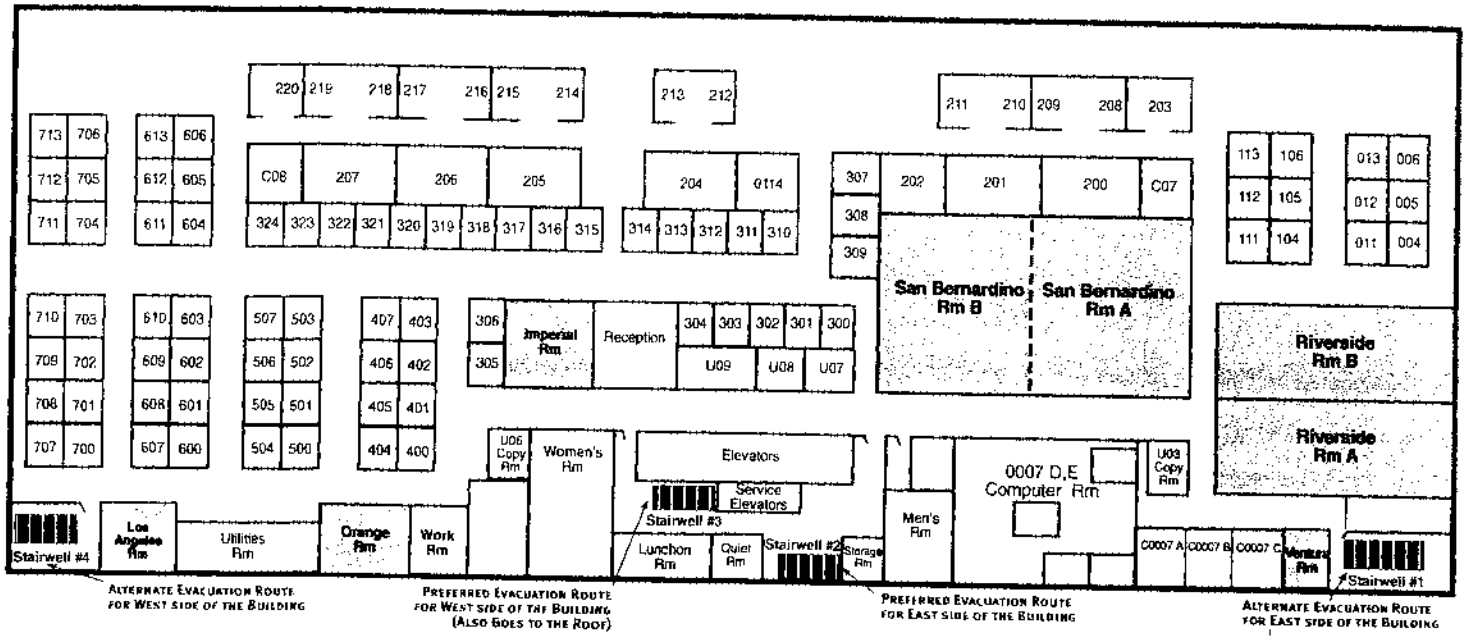
Upon meeting at 8th and Figueroa, roll will be taken. Do not leave the area without making contact with a floor warden, who will be wearing an orange vest.



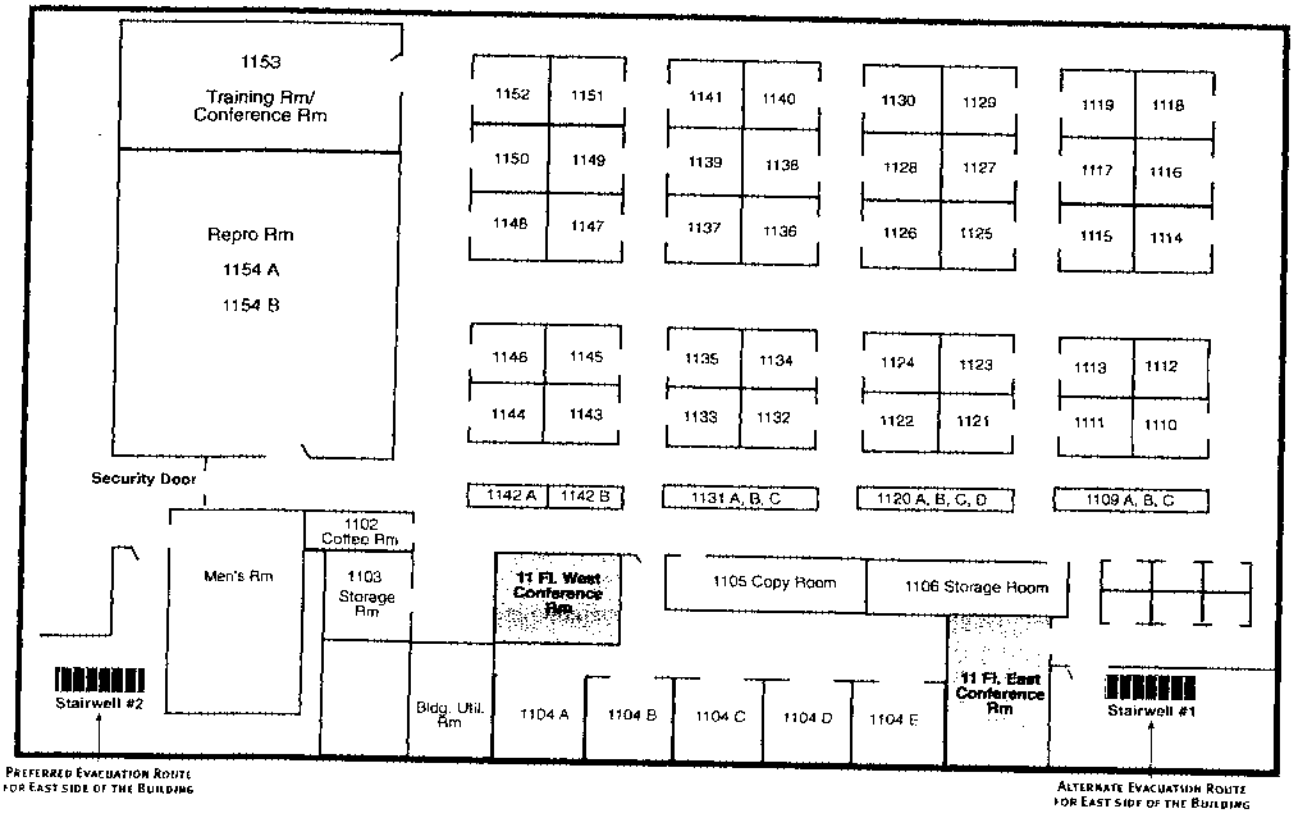
SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

1450 3/0

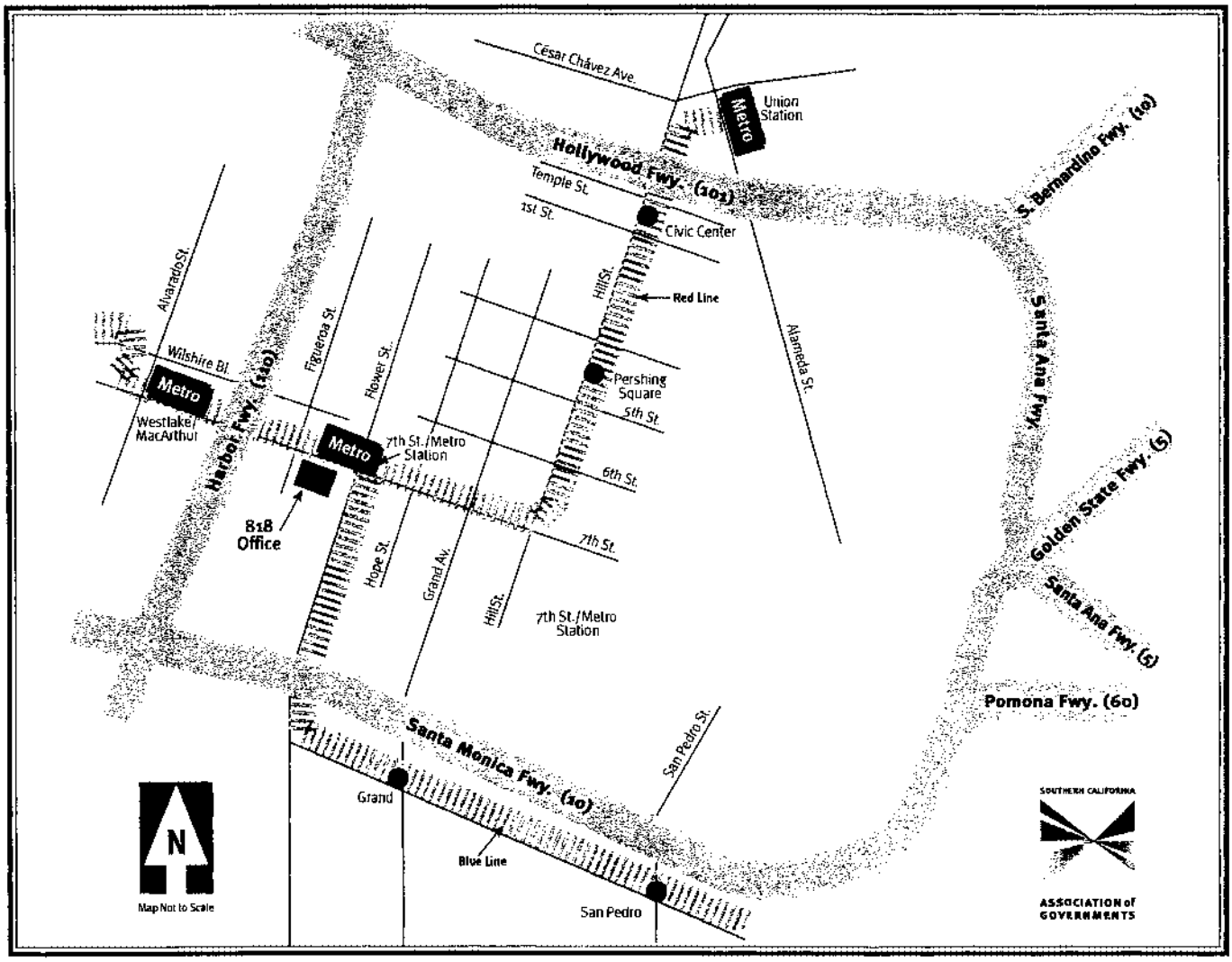
SCAG Offices Floor Plan & Emergency Exits on the 12th Floor



SCAG Offices Floor Plan & Emergency Exits on the 11th Floor



How to get to the Southern California Association of Governments



To Get to the 818 Building

- Harbor Freeway (110) Exit on 6th Street, turn right on Flower.

By Transit...

- SCAG is accessible by all **Metrolink Service** to Union Station. At transfer to the **Metro Red Line** (free transfer with Metrolink ticket) and get off at 7th and Metro **Station. Metro Line Service** to SCAG is also available from Alvarado Station.
- SCAG is accessesible by the **Blue Line.** Get off at 7th and Metro Station.
- SCAG is served directly by **DASH** Routes A and B. **Bus Service** via MTA, Foothill, Santa Monica, Orange County is available to downtown. Call **1-800-Commute** for details.

SCAG Main Office:
818 West 7th Street 12th Floor Los Angeles, CA 90017-3435 (213) 236-1800 fax: (213) 236-1825

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

Rev. 12/30/97

ENERGY & ENVIRONMENT COMMITTEE

AGENDA

		PAGE #	TIME
1.0	CALL TO ORDER		
2.0	PUBLIC COMMENT PERIOD **Members of the public desiring to speak on an agenda item or items not on the agenda, but within the purview of the Committee, must fill out and present a speaker's card to the Assistant prior to speaking. A speaker's card must be turned in before the meeting is called to order. Comments will be limited to three minutes. The chair may limit the total time for all comments to twenty (20) minutes.**		
3.0	REVIEW and PRIORITIZE AGENDA ITEMS		
4.0	CONSENT CALENDAR		
4.1	Approval Item		
4.1.1	Action Minutes – September 2, 2004 **Attachment**	**01**	
4.2	Receive and File		
4.2.1	SCAG Legislative Matrix **Attachment**	**05**	
4.2.2	Intergovernmental Review Clearinghouse Report (IGR) Available on the SCAG web site at: http://www.scag.ca.gov/igr/creport.htm		

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

ENERGY & ENVIRONMENT COMMITTEE

AGENDA

			PAGE #	TIME
5.0	**ACTION ITEMS**			
5.1	Salton Sea Authority Resolution **Attachment** The Salton Sea Authority's preferred alternative plan offers a basis for local-state cooperation. Resolution calls for recognition of the work, urges early funding and plan selection. **Recommended Action:** Recommend Regional Council support Resolution #04-055-1.	**Dan Griset, Sr. Regional Planner, SCAG**	**09**	10 minutes
5.2	Intergovernmental Framework for Water Quality **Attachment** Water Policy Task Force recommends that SCAG authorize the Executive Director to offer SCAG assistance in development of an intergovernmental framework for water quality. **Recommended Action:** Recommend that the Regional Council support authorization.	**Dan Griset, Sr. Regional Planner, SCAG**	**14**	5 minutes
6.0	**INFORMATION ITEMS**			
6.1	AQMD's Model Air Quality Element **Attachment** AQMD staff will give a status report on their model air quality element, which is being developed to provide cities and counties with useful air quality information that can be incorporated into the General Plan.	**Terry McCall, Air Quality Specialist, AQMD**	**16**	20 minutes

AGENDA

			PAGE #	TIME
6.2	Children's Health Study **Attachment** ARB/USC will present the major findings of their recently completed long-term study of the relationship between exposure to air pollution and children's health	**Richard Bode, Chief, Health Exposure Assessment Branch, ARB**	21	25 minutes
6.3	Air Quality Update **Attachment** Staff will brief the Committee on air quality items, including the new 8-hour ozone and PM2.5 Standards.	**Ted Harris, Assoc. Regional Planner, SCAG**	30	15 minutes

7.0 WATER POLICY TASK FORCE REPORT

8.0 CHAIR'S REPORT

9.0 STAFF REPORT

10.0 FUTURE AGENDA ITEMS

Any Committee members or staff desiring to place items on a future agenda may make such request. Comments should be limited to three (3) minutes.

11.0 ANNOUNCEMENTS

12.0 ADJOURNMENT

The next meeting of the Energy and Environment Committee will be held in the SCAG offices on Thursday, November 4, 2004.

Energy and Environment Committee

Action Minutes

Meeting Date: Thursday, September 2, 2004

Meeting Location: SCAG Offices
818 West 7th Street, 12th Floor
Los Angeles, CA 90017

The following minutes are a summary of actions taken by the Energy and Environment Committee. Audio recordings of the meeting may be heard in the SCAG office during office hours.

Committee Chair: Hank Kuiper, Imperial County
Committee Vice Chair: Margaret Clark, Rosemead

Members Present	Representing	Members Absent	Representing
Clark, Margaret	Rosemead	Ashley, Marion	Riverside
Cook, Debbie	Huntington Beach	Eckenrode, Norman	Placentia
Marchand, Paul	Cathedral City	Feinstein, Michael	Santa Monica
Miller, Michael	West Covina	Forester, Larry	Signal Hill
Nelson, Larry	Artesia	Harrison, Jon	Redlands
Van Arsdale, Lori	Hemet	Krause, Mary Anne	Santa Paula
Washburn, Dennis	Calabasas	Kuiper, Hank	Imperial
Young, Toni	Port Hueneme	Portantino, Anthony	La Cañada/Flintridge
		Yoon, Art	Hermosa Beach

New Members	Representing
None	

#103277 v1 - EEC MINUTES TEMPLATE
Prepared by Lisa Taylor
Last printed 09/23/04 10:39 AM

Energy and Environment Committee

Action Minutes

1.0 CALL TO ORDER

Hon. Margaret Clark, Vice Chair, called the meeting to order at 10:35 a.m.

2.0 PUBLIC COMMENT PERIOD

None

3.0 REVIEW and PRIORITIZE

Pursuant to Government Code (Brown Act) § 54954.2(b)(2), upon determination by two-thirds vote of the legislative body that there is a need to take immediate action and the need arose after the posting of the agenda, Item 5.2 was added to the Agenda.

Motion by Marchand to add Item 5.2, Seconded by Washburn, then Unanimously Approved by the Committee.

4.0 CONSENT CALENDAR

4.1 Approval Item

4.1.1 Action Minutes of August 5, 2004

4.2 Receive and File

4.2.2 Intergovernmental Review (IGR)

Motion by Young to approve, Seconded by Marchand, then Unanimously Approved by the Committee.

5.0 ACTION ITEMS

5.1 2004 Regional Transportation Improvement Program (RTIP)

Ted Harris, SCAG staff, briefed the Committee on the environmental component of the Regional Transportation Improvement Program (RTIP). The federal Clean Air Act requires the Regional Council to determine transportation air quality conformity for the 2004 RTIP. The Committee was asked to recommend that the Regional Council approve the air quality conformity determination for the 2004 RTIP as part of resolution #04-453-2.

Motion by Young to approve staff recommendation, Seconded by Cook, then Unanimously Approved by the Committee.

6.2 AB 2006: Reliable Electric Service Act

Felix Oduyemi, Southern California Edison, briefed the Committee on the history of the California energy crisis and the remaining lack of adequate generation to supply residences and businesses in southern California. As a result, AB 2006 was created as a regulatory certainty to secure monetary support and encourage financial institutions to reinvest in power plant development and stimulate competition. The Committee was informed that the bill had been submitted to the Governor after the posting of the agenda, and asked to draft a letter in support of AB 2006.

Pursuant to Government Code (Brown Act) § 54954.2(b)(2), upon determination by two-thirds vote of the legislative body that there is a need to take immediate action and the need arose after the posting of the agenda; Item 6.2 was amended to Action Item.

Motion by Clark to amend Information Item 6.2 to an Action Item, Seconded by Young, then Approved by a two-thirds vote of the Committee.

Motion to draft a letter in support of AB 2006 by Longville, Seconded by Van Arsdale, then Approved by a majority vote of the Committee.

5.2 AB 2141 (Longville) Floodplain Management

This bill requires the State Department of Water Resources to establish an Alluvial Fan Task Force by June 30, 2005, to develop a model ordinance and makes recommendations related to alluvial fan floodplain management issues by June 2006. The bill is contingent upon funding from the federal government for private sources and expressly prohibits the use of state funds. The Committee was informed that the bill had been submitted to the Governor after the posting of the agenda.

Motion by Young to draft a letter in support of AB 2141, Seconded by Cook, then Unanimously Approved by the Committee.

6.0 INFORMATION ITEMS

6.1 Water Quality Study

Professor Arturo Keller, UC Santa Barbara's Bren School of Environmental Science and Management, provided the Committee with a presentation on a study or regional water quality impacts due to new transportation projects, growth, and land use changes.

6.3 Intergovernmental Review (IGR) Year 2003 Activity Report

Jeffrey Smith, SCAG staff, provided the Committee with information on regionally significant local plans, projects and programs that pertain to policies of the Regional Comprehensive Plan and Guide and the Regional Transportation Plan.

6.4 Clean Cities Program

Jo Ann Armenta, representing The Partnership, provided the Committee with a summary of the Clean Cities activities for the past fiscal year and outlined some of their future projects.

6.5 Regional Comprehensive Plan (RCP)

Ashwani Vasishth, SCAG staff, provided the Committee with a framework of SCAG's efforts to prepare a new Regional Comprehensive Plan. The plan will focus on region-wide implementation of policies and recommendations formulated in SCAG's Regional Transportation Plan (RTP) and Southern California Compass growth visioning process.

7.0 WATER POLICY TASK FORCE

Next meeting is scheduled for September 9, 2004 at SCAG.

8.0 CHAIR'S REPORT

None

9.0 STAFF REPORT

None

10.0 FUTURE AGENDA ITEMS

None

11.0 ANNOUNCEMENTS

None

12.0 ADJOURNMENT

Hon. Margaret Clark, Vice Chair, adjourned the meeting at 12:20pm. The next meeting will be held in the SCAG offices on Thursday, November 4, 2004.

Action Minutes Approved by:

for

Sylvia Patsaouras, Manager
Energy and Environment

MEMO

DATE: October 7, 2004

TO: Energy and Environment Committee

FROM: Charlotte Pienkos, Government Affairs Analyst
Phone: (213) 236-1811 E-Mail: eckelbec@scag.ca.gov

SUBJECT: State Legislative Matrix

SUMMARY:

Attached to this memorandum are the bills and constitutional amendments of interest to the Energy and Environment Committee.

As of this writing on September 16th, the Governor may still sign or veto bills in his possession until September 30th. Several bills on which SCAG took positions remain on the Governor's desk, as is indicated on the matrix. Government Affairs will provide an update to the committee on the Governor's actions at the October 7th meeting.

CAP#98918

SOUTHERN CALIFORNIA
ASSOCIATION of GOVERNMENTS

Private file: AirQuality

CA AB 1971

AUTHOR: Lowenthal (D)
TITLE: Air Pollution: Marine Terminals
FISCAL COMMITTEE: no
URGENCY CLAUSE: no
INTRODUCED: 02/12/2004
LAST AMEND: 07/12/2004
LOCATION: To Governor
SUMMARY:

Relates to requirements that each marine terminal in the state operate in a manner that does not cause the engines on trucks to idle or queue for more than 30 minutes while waiting to load or unload at the terminal. Makes several clarifying changes to those provisions regarding the application of the above requirements with respect to both idling and queuing. Requires air control districts to make a determination with regard to queuing trucks.

STATUS:

08/27/2004 *****To GOVERNOR.

NOTES: Lowenthal Staff: Josh Tooker (916) 319-2054

COMMENTARY:

In 2003, SCAG supported the original Lowenthal bill that created the idling and queing prohibition, AB 2650.

Position: SCAG-Sup *04/07/2004*

CA AB 2042

AUTHOR: Lowenthal (D)
TITLE: Ports: Port of Los Angeles: Port of Long Beach
FISCAL COMMITTEE: yes
URGENCY CLAUSE: no
INTRODUCED: 02/17/2004
LAST AMEND: 08/17/2004
LOCATION: Enrolled
SUMMARY:

Requires the South Coast Air Quality District to establish a baseline for air quality for the Ports of Los Angeles and Long Beach. Provides the baselines would be based on data regarding emissions from oceangoing vessels, habor craft, cargo handling equipment, rail locomotives and commercial motor vehicles. Requires the district, the two ports and the Air Resources Board to develop and enter into a memorandum of understanding to implement emission control measures at those ports.

STATUS:

08/25/2004 In ASSEMBLY. ASSEMBLY concurred in SENATE amendments. To enrollment.
08/25/2004 Enrolled.

NOTES: Lowenthal Staff: Josh Tooker (916) 319-2054

COMMENTARY:

Considered by the EEC 5/6/04 and 6/3/04. Amendment submitted to Assembly Member Lowenthal adding SCAG to the groups consulted in the MOA and including user-supported, dedicated infrastructure among possible emission control measures.

CA AB 2628

AUTHOR: Pavley (D)
TITLE: Vehicles: Preferential Lanes
FISCAL COMMITTEE: no
URGENCY CLAUSE: no
INTRODUCED: 02/20/2004
LAST AMEND: 08/23/2004
LOCATION: To Governor
SUMMARY:

Includes a 2004 model year ultra-low emission vehicle and a hybrid vehicle that meets the State's advanced technology partial zero-emission vehicle standard for criteria pollutant emissions and has a 45 miles per gallon or greater fuel economy highway rating and a hybrid vehicle that was produced during the 2004 model year or earlier and has a 45 miles per gallon or greater fuel highway rating and ultra- and super ultra-low emission vehicles to list of vehicle using HOV lanes.

STATUS:

09/13/2004 *****To GOVERNOR.

Position: CALCOG-Opp, SCAG-Opp *06/03/2004*

Private file: Energy

CA AB 2006

AUTHOR: Nunez (D)
TITLE:

0006

Electrical Restructuring Public Utility Commission
FISCAL COMMITTEE: yes
URGENCY CLAUSE: no
INTRODUCED: 02/13/2004
LAST AMEND: 08/25/2004
LOCATION: To enrollment
SUMMARY:
Requires the Public Utilities Commission to hold a hearing to review any settlement agreement that has a certain ratepayer obligation requirement. Requires electrical corporations to file a long-term integrated resource plan. Requires the commission to submit a plan to streamline the transmission siting process. Requires the Independent System Operator to establish resource adequacy requirements to ensure generating capacity to serve load requirements and to meet peak demands.
STATUS:
08/27/2004 In ASSEMBLY. ASSEMBLY concurred in SENATE amendments. To enrollment.
Position: SCAG-Sup *09/02/2004*

Private file: Environment

CA AB 2055

AUTHOR: Wolk (D)
TITLE: General Plan Elements
FISCAL COMMITTEE: no
URGENCY CLAUSE: no
INTRODUCED: 02/17/2004
LAST AMEND: 08/16/2004
LOCATION: To Governor
SUMMARY:
Provides the conservation element may include the conservation of agricultural lands. Provides the open space element, which would be renamed as a agricultural and open space element, is the component of a county or city general plan adopted by the legislative body. Provides subjects that may be included in the agricultural and open-space element.
STATUS:
08/31/2004 *****To GOVERNOR.

CA AB 2251

AUTHOR: Lowenthal (D)
TITLE: Hazardous Waste Facilities Permits: Financial Assurance
FISCAL COMMITTEE: yes
URGENCY CLAUSE: no
INTRODUCED: 02/19/2004
LAST AMEND: 08/16/2004
LOCATION: To enrollment
SUMMARY:
Requires a hazardous waste facility owner or operator intending to extend the term of the facility's permit to submit a complete application before the permit expires. Authorizes the owner or operator to to change the facility structures or equipment using a Class 1* permit if it is determined that the change is necessary to comply with state and federal laws or air quality standards. Requires a facility financial assurance be a trust fund, surety bond or other authorized assurance.
STATUS:
08/27/2004 From SENATE Committee on APPROPRIATIONS: To second reading without further hearing pursuant to Senate Rule 28.8.
08/27/2004 In SENATE. Read second time. To third reading.
08/27/2004 In SENATE. Read third time. Passed SENATE. *****To ASSEMBLY for concurrence.
08/27/2004 Re-referred to ASSEMBLY Committee on ENVIRONMENTAL SAFETY AND TOXIC MATERIALS.
08/27/2004 From ASSEMBLY Committee on ENVIRONMENTAL SAFETY AND TOXIC MATERIALS: Recommend concurrence in SENATE amendments.
08/27/2004 In ASSEMBLY. ASSEMBLY concurred in SENATE amendments. To enrollment.

Private file: SCAG

CA AB 2207

AUTHOR: Levine (D)
TITLE: Statistical Districts: San Fernando Valley
FISCAL COMMITTEE: yes
URGENCY CLAUSE: no
INTRODUCED: 02/18/2004
ENACTED:

		07/19/2004
	LOCATION:	Chaptered
	CHAPTER:	181
	SUMMARY:	

Requires any state agency or department that develops and maintains data and statistics on the municipal level, to make a separate breakdown of the San Fernando Valley, in the preparation and maintenance of any statistical analyses by city. Authorizes state agencies to require the City of Los Angeles to provide all necessary data. Provides for an alternative method be used to determine the separate breakdown if a tax area code is used in the analysis.

STATUS:

07/20/2004 Chaptered by Secretary of State. Chapter No. 181

COMMENTARY:

The statistical data that will be provided as the result of enactment of AB 2207 will assist SCAG's planning efforts.

Position: SCAG-Sup *04/02/2004*

Private file: SolidWaste

CA AB 1873	**AUTHOR:**	Hancock (D)
	TITLE:	Solid Waste: Recycling Market Development
	FISCAL COMMITTEE:	yes
	URGENCY CLAUSE:	no
	INTRODUCED:	02/03/2004
	ENACTED:	09/14/2004
	LOCATION:	Chaptered
	CHAPTER:	500
	SUMMARY:	

Extends the operation and repeal of the Recycling Market Development Revolving Loan Program, including the extension of the operation and repeal of the continuously appropriated subaccount thereby continuing the effect of the program indefinitely.

STATUS:

09/14/2004 Signed by GOVERNOR.
09/14/2004 Chaptered by Secretary of State. Chapter No. 500

Position: CSAC-Watch

Private file: WaterQuality

CA AB 2141	**AUTHOR:**	Longville (D)
	TITLE:	Floodplain Management: Alluvial Fan Task Force
	FISCAL COMMITTEE:	yes
	URGENCY CLAUSE:	no
	INTRODUCED:	02/18/2004
	LAST AMEND:	05/20/2004
	LOCATION:	To Governor
	SUMMARY:	

Requires the Director of Water Resources to establish the Alluvial Fan Task Force to review the state of knowledge regarding alluvial fan floodplains and to prepare recommendations relating to alluvial fan floodplain management. Requires the task force to develop a model ordinance on alluvial fan flooding.

STATUS:

08/26/2004 *****To GOVERNOR.

Position: SCAG-Sup *09/02/2004*

REPORT

DATE: October 7, 2004

TO: Energy and Environment Committee

FROM: Daniel Griset, Senior Regional Planner, (213) 236-1895, griset@scag.ca.gov

SUBJECT: Salton Sea Authority Support Resolution

EXECUTIVE DIRECTOR'S APPROVAL:

RECOMMENDED ACTION:

Energy and Environment Committee recommends that the Regional Council approve Resolution #04-455-1 supporting the Salton Sea Authority's Efforts to Identify and Implement Corrective Measures to Preserve the Beneficial Uses of the Salton Sea and urging early State and Local Cooperation on Action Plans and Funding.

BACKGROUND:

The Salton Sea is a lake occupying a desert basin known as the Salton Sink. This body of water covers a surface area of 376 square miles, making it the largest lake in California. The Salton Sea has a unique make-up. By virtue of its location in the Colorado Desert ecosystem, an area with average annual precipitation of less than 3 inches per year, the Sea receives minimal inflow from rain. 90 percent of the entire inflow to the Sea is agricultural runoff from the Imperial, Coachella, and Mexicali Valleys. This inflow carries nutrients, such as phosphates and nitrates, which support the rich and abundant life in the Sea. The inflow also carries an abundance of salt (and thus the Sea's name).

The Sea's Challenges

The very things that make this lake so unique and such a rich source of abundant life are placing the Sea's existence at risk. The nutrients that provide such an abundant source of food for fish are at levels that alter the available oxygen in the water. Its salt content may someday be so high as to compromise the reproductive ability of fish and, thus, their survival. Without fish, the hundreds of species of birds that rely on fish for food, and the economic status of the Sea as a productive fishery, would be threatened.

Its unique feature of being a shallow, closed basin renders it vulnerable to increases or reductions in inflows, which can dramatically change its elevation. The proposed transfer of water from the Imperial Valley to San Diego as part of the reduction of California's Colorado River use, the possible reclamation of New River water by Mexico, and the increased evaporation from the Sea's restoration all threaten to reduce lake levels. The result could be potential air quality problems caused by blowing dust, seaside homes stranded far from the Sea, and greatly accelerated concentrations of salts and nutrients.

Movement towards Restoration
The Salton Sea Authority has recognized the Sea's challenges and has begun the restoration process, to not only sustain the Sea, but also revitalize it as an environmental and economic wellspring. The Salton Sea Authority, along with the U.S. Department of Interior's Bureau of Reclamation, has begun efforts to maintain the Sea as an agricultural drainage reservoir, restore the wildlife resources and habitats, stimulate recreational use, and provide an environment for economic development.

The Authority's Preferred Project Selection
Following the development of alternative restoration plans the Authority selected a Preferred Project for support and funding. The process leading up to this selection is documented in the *Salton Sea Restoration Preferred Project Report* (an Executive Summary is available at (http://www.saltonsea.ca.gov/media/ppr_summary.pdf). The Report documents the process that resulted in the Authority's identification of a Preferred Project Alternative, including discussion of how the Sea could respond to inflow reductions and provision of restoration options according to the program objectives authorized in the Salton Sea Restoration Reclamation Act of 1998.

This Preferred Project Alternative involves construction of a mid-sea barrier that would divide the Sea into two marine areas. The northern area would be maintained to achieve lower salinity levels while the southern area would become increasingly saline by design. As water reclamation occurs, the residual salts would be accumulated in the more saline water body. Water inflows from the New and Alamo Rivers would be managed to support a variety of wetlands, habitats and fishing areas at the edges of the southern area.

The objectives of the Preferred Project Alternative are summarized as follows:

- Permitting the continued use of the Salton Sea as a reservoir for irrigation drainage,
- Reducing and stabilizing the overall salinity of the Salton Sea,
- Stabilizing the surface elevation of the Salton Sea,
- Reclaiming, in the long term, healthy fish and wildlife resources and their habitats, and
- Enhancing the potential for recreational uses and economic development of the Salton Sea.

Another important consideration in the restoration of the Sea is the role the state has through its financial obligations in the Quantification Settlement Agreement (QSA) reached in 2003 between various water, state and federal agencies. The QSA set up the terms for the transfer of Colorado River water from farms in the Imperial Valley to urban consumers in San Diego County. Within these terms, the QSA linked the Sea's restoration to the management of water resources in the Coachella and Imperial Valleys.

Because of the state's financial obligations (defined both in the QSA and other agreements) it has a key role in determining what corrective actions are to be taken for the Sea's restoration. This added level of study and decision making is a matter of concern for the Authority, a regional joint powers authority with broad governmental representation and participation. The Authority has voiced concern about the effect of the state's planning and policy process, especially the potential for duplications of effort and needless delays in getting Sea restoration efforts underway. Even with the

state's role in project approval and funding, the Authority seeks an affirmation of its role as the lead agency in matters relating to planning and implementation of Salton Sea restoration measures.

Staff has prepared a resolution that addresses these concerns and recognizes the need for continuous cooperation between the Authority and other funding partners in a timely selection of a final action plan for restoration of the Sea. With the selection of an action plan that has the support of the Authority and the state, the prospects will immediately improve for realizing a long-awaited vision of the Salton Sea as one of the region's valued environmental resources.

FISCAL IMPACT: SCAG's adoption of the recommended resolution will have no fiscal impact on SCAG. The staff expense related to work on these water issues is supported by funding from work element 05-320.

DOCS #103475 v1
Griset 9-23-04

RESOLUTION No. 04-455-1

**A RESOLUTION OF
THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS
IN SUPPORT OF
THE SALTON SEA AUTHORITY'S ROLE AS THE LEAD AGENCY IN
IDENTIFYING AND IMPLEMENTING CORRECTIVE MEASURES TO
PRESERVE THE BENEFICIAL USES OF THE SALTON SEA**

WHEREAS, the Southern California Association of Governments (SCAG) is the Metropolitan Planning Organization (MPO) for six counties: Imperial, Los Angeles, Orange, San Bernardino, Riverside, and Ventura;

WHEREAS, the Salton Sea is California's largest inland water body with beneficial uses including fisheries and wildlife habitat, recreation, and preservation of endangered species.

WHEREAS, the Salton Sea ecosystem is a critical link on the international Pacific flyway and supports a productive fishery and over 300 species of birds.

WHEREAS, with the loss of wetlands areas within California, the Salton Sea ecosystem has become an even more important ecological resource.

WHEREAS, the Sea is threatened by increasing salinity and water loss.

WHEREAS, the Salton Sea Authority is a joint powers agency chartered by the State of California in a Joint Powers Agreement on June 2, 1993 and serves as the local lead agency for identifying and implementing corrective measures to preserve the beneficial uses of the Sea.

WHEREAS, the Salton Sea Authority is comprised of Riverside County, Imperial County, Imperial Irrigation District, and the Coachella Valley Water District, with pending full membership by the Torres Martinez Desert Cahuilla Tribe. It's ex-officio members include the Southern California Association of Governments, the Imperial Valley Association of Governments and the Coachella Valley Association of Governments. It has cooperative relationships with the Federal lead agency, the U.S. Bureau of Reclamation and the United States Geological Survey Salton Sea Science Office, and the University of Redlands. It has worked closely on restoration efforts with the Regional Water Quality Control Board, regional universities, the Salton Sea Environmental Coalition, and many state, federal and local agencies.

WHEREAS, the Salton Sea Authority has made a concerted effort to collect all known suggestions for remediation of the Salton Sea and has subjected these proposals to formal review against specified criteria. The Salton Sea Authority has implemented, with various partners, projects and programs to improve wildlife health, the fishery, water quality and the aesthetic environment of the area. The Authority also is taking concrete steps in

preparing for the detailed planning of a remediation project known as its Preferred Project Alternative.

WHEREAS, recent State legislation linked to the Colorado River Quantification Settlement Agreement (QSA) recognizes the Salton Sea as a critical environmental issue to be addressed and provides up to $50 million in Proposition 50 funds and approximately $300 million from the sale of water that would otherwise flow to the Sea for that purpose.

WHEREAS, in response to the recent state QSA legislation, the State of California is implementing a new Salton Sea Restoration process funded by Proposition 50 funds.

WHEREAS, the Salton Sea Authority Board of Directors has expressed concerns that another State planning process will potentially duplicate efforts, waste resources, and delay selection of a preferred project design.

NOW, THEREFORE, BE IT RESOLVED by the Regional Council of the Southern California Association of Governments, that SCAG does hereby support the Salton Sea Authority in its role as the lead agency for developing and implementing measures to preserve and restore the beneficial uses of the Sea.

BE IT FURTHER RESOLVED that SCAG urges the State to join the Salton Sea Authority, the Bureau of Reclamation, the Salton Sea Science Office and other key stakeholders to coordinate planning efforts and minimize unnecessary delays in selecting a final plan of action for stabilizing the long-term future of the Salton Sea ecosystem.

APPROVED AND ADOPTED by the [vote] of the Regional Council of the Southern California Association of Governments at a regular meeting on this 7th day of October, 2004.

RON ROBERTS
President, SCAG
Councilmember, City of Temecula

Mark Pisano
Executive Director, SCAG

Karen Tachiki
Chief Legal Counsel, SCAG

Doc #103471 v1
Griset 9-20-04

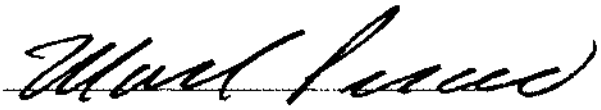
REPORT

DATE: October 7, 2004

TO: Energy and Environment Committee
Regional Council

FROM: Daniel Griset, Senior Planner, (213) 236-1895, griset@scag.ca.gov

SUBJECT: SCAG Assistance on Intergovernmental Framework for Water Quality

EXECUTIVE DIRECTOR'S APPROVAL: 

RECOMMENDED ACTION:

The Water Policy Task Force recommends that the Executive Director be authorized to offer SCAG's assistance to the Los Angeles Regional Water Quality Control Board for development of an intergovernmental framework through which comprehensive and coordinated Total Maximum Daily Load (TMDL) implementation planning can be done for water quality compliance in the Los Angeles River watershed.

BACKGROUND:

At its meeting on September 9 the Water Policy Task Force heard testimony from a panel of speakers who discussed the Los Angeles River Metals TMDL proposed by the Los Angeles Regional Water Quality Control Board. A TMDL is a pollution control plan that is required by the Clean Water Act when water impairments are identified by local or state authorities. One of the water quality impairments of the Los Angeles River owes to the presence of metals in certain River reaches. As a result the Regional Board recently proposed a set of rules for eliminating the impairments, along with a plan for implementing specified control measures. The details of this Metals TMDL were described to the Task Force by Melinda Becker, a member of the Board staff.

The other speakers on the panel represented the following parties: the County of Los Angeles, the City of Los Angeles, the City of Burbank, the Coalition (of Cities) for Practical Regulation, and Caltrans District #7. Each speaker listed a variety of concerns with the proposed TMDL. The gravity of these concerns, already expressed at previous Board workshops, were sufficient to cause the Board to delay its adoption of a plan on September 2, 2004. (As a result, the federal court mandated deadline for the adoption of the Metals TMDL by the Board will require the USEPA to promulgate interim plan requirements without a TMDL implementation plan.)

One panelist brought forward a concern about the need for intergovernmental cooperation and coordination on Los Angeles River issues. He noted that 34 cities along the Los Angeles River each have responsibility for improving the water quality of the River but have no local agency framework in which to cooperate on policy and planning issues and on comprehensive, cost-effective

implementation of pollution controls.

This concern tracks closely with SCAG's continuing interest and past support for local agency initiatives that use an "areawide" or watershed approach in planning and implementing the pollution controls needed to eliminate water impairments in the watersheds in the SCAG region.

This effort would focus on the planning and implementation of what are often referred to as "regional solutions". While this kind of strategy minimizes the duplication of environmental efforts and creates needed cost efficiencies for financially-strapped local agencies, it also requires the development of a intergovernmental framework in which these agencies can reach decisions, adopt cooperative measures and fund shared obligations. The Task Force believes that SCAG can facilitate this institutional framework and contribute to efforts will bring more cost-effective decision making to Los Angeles River watershed initiatives.

This approach to "regional solutions" is the subject of on-going discussions between staff and leaders in the California Councils of Government organization and elsewhere. These discussions address the need for a partnership approach between water quality regulators and the local governments responsible for compliance with discharge permits and other pollution control requirements in Basin Plans throughout California. This new approach would bring changes in the way the state's water quality process is structured. If adopted by state decision makers, this new approach would create new roles for local jurisdictions to the plan and implement pollution control measures and related programs. In these roles local jurisdictions would work closely with the state's water quality regulators who are responsible for determining beneficial uses and setting water quality objectives and for other rulemaking.

In the event that the Los Angeles Regional Water Quality Control Board responds favorably to this proposed offer of assistance, staff will work with the staff of the Board and of affected local jurisdictions to draft a conceptual implementation framework for the review and consideration of all affected parties.

FISCAL IMPACT: The offer by SCAG to assist in the development of an intergovernmental framework for water quality efforts along the Los Angeles River will have no fiscal impact on SCAG. The staff expense related to work on these water issues is supported by funding from work element 05-320. Any subsequent work resulting from a favorable response by the Regional Board will be the subject of a future report by staff to the appropriate policy committee(s) and the Regional Council.

DOCS #103299 v1

MEMO

TO: Energy and Environment Committee

FROM: Ted Harris, Associate Planner, 213-236-1916, harrist@scag.ca.gov

DATE: October 7, 2004

SUBJECT: South Coast Air Quality Management District Model Air Quality Element

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Recommended Action:

Information.

BACKGROUND

The South Coast Air Quality Management District (SCAQMD) is preparing a Model Air Quality Element for General Plan Updates to assist cities and counties in the South Coast Air Basin to help improve air quality. An Air Quality Element in a General Plan is optional in California, and the Model Air Quality Element is intended to encourage cities and counties to adopt or update an Air Quality Element to help protect citizens within their boundaries and to collectively improve air quality throughout Southern California.

SCAG has recently initiated the process to update the Regional Comprehensive Plan (RCP), which includes an Air Quality Element. The Regional Comprehensive Plan is an action oriented, advisory, long range planning tool that promotes regional policy objectives, such as improving air quality. The purpose of the RCP Air Quality element will be to promote measures designed to reduce emissions and improve ambient air quality. The South Coast Air Quality Management District's Model Air Quality Element can complement SCAG's RCP Air Quality element, and coordinating the SCAQMD's Model Air Quality Element with SCAG's RCP Air Quality element could help bolster the success of both efforts.

Terry McCall, Air Quality Specialist for SCAQMD, will provide an overview of the purpose and content of the SCAQMD's Model Air Quality Element. His presentation is attached.

Status Report on Developing

AQMD's
Model Air Quality Element
(MAQE)

October 2004

1

Seven Elements Required General Plans

- **Circulation**
- **Conservation**
- **Housing**
- **Land Use**
- **Noise**
- **Open Space**
- **Safety**

2

What is the MAQE

- A user-friendly Resource Guide that provides information on air quality and public health that can be integrated into land use decisions
- A wide range of options to develop or update air quality element
- Cities have the option of adopting portions of the MAQE in the existing Plan or as a separate Element in the Plan

3

Why Add MAQE?

- A tool for local government participation in air quality stewardship is through the exercise of wise land use authority.
- Protect public health of residents and help the region achieve clean air.

4

Goals

- Reduce air pollution impacts on sensitive receptors (i.e., schools, residences) by encouraging the use of barriers and distance requirements to separate sensitive receptors from emission sources.

5

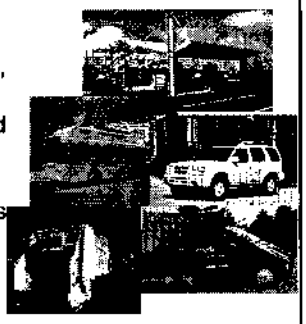
Goals

- Adopt a definition/ policy to ensure land use decisions are made in an equitable fashion to protect residents, *regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location*, from the health effects of air pollution.

6

Goals

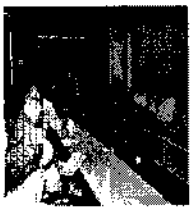
- Reduce pollution from mobile sources, specifically toxic diesel emissions and support legislation that promotes clean fuel-efficient vehicles



7

Goals

- Developing multi-jurisdictional cooperation by coordinating with the AQMD to ensure the air quality plan and emission reduction elements in environmental assessments are implemented



8

Goals

- Reduce pollution from stationary sources:
  - **Developing standards and design guidelines to require use of building materials and methods to reduce emissions**
  - **Suspension of grading operations during smog alerts and on windy days**
  - **Enforcing the city clearance letter provision of State Law**

9

Outreach

- **Stakeholder Meetings**
- **Public Consultation Meetings**
  - March and April 2004
- **Outreach to Cities and Counties – 2005**
  - Target cities without air quality elements in their General Plans
  - Encourage cities with air quality elements to update them based on the MAQE

10

Adoption Schedule

- **Revised Draft – October**
- **Stakeholder Meeting on Revised Draft - October**
- **Governing Board Adoption Hearing- November 2004 (Tentative)**

11

MEMO

TO: Energy and Environment Committee

FROM: Ted Harris, Associate Regional Planner, 213-236-1916, harrist@scag.ca.gov

DATE: October 7, 2004

SUBJECT: Children's Health Study

Recommended Action:

Information.

BACKGROUND

The committee will be briefed on the California Air Resources Board (ARB)/University of Southern California (USC) Children's Health Study, which has provided new findings on the effects of air pollution on children's health. This 10-year, $18 million study produced results showing how air pollution reduces children's lung growth and function, impacts respiratory health in asthmatic children, including new asthma cases, and contributes to increased school absences.

California ARB Chairman Dr. Alan Lloyd said, "This study has added greatly to our basic understanding of air pollution's effects on our children's health and reinforced the need to continue our efforts to reduce the pollution affecting millions of children."

The study, conducted by researchers from the University of Southern California (USC), was the nation's first large-scale effort to study the effects of long-term exposure to outdoor air pollution in children, one of our most sensitive populations.

The study followed more than 5500 children at 52 schools in twelve Southern California communities from elementary through high school to track how different outdoor air pollution exposures affect respiratory health. The majority of children enrolled in the program as fourth-graders and were followed through high school.

The major findings of the study were:

- Significant lung function deficits are most closely associated with exposure to nitrogen dioxide, atmospheric acidity, PM 2.5 and PM10. This decreased lung development may have permanent adverse effects in adulthood.
- Children living in high ozone communities, who are especially active, are up to three times more likely to develop asthma.
- Children living near roadways with high traffic experienced an increased risk for having been diagnosed with asthma.
- Short-term exposures to elevated ozone levels are associated with a significant increase in school absences from both upper respiratory illness with symptoms such as runny nose and lower respiratory illnesses such as asthma attacks.

- Children who move to cleaner communities with lower levels of PM have improvements in lung function growth rates. This means that even small reductions in air pollution can have immediate benefits to the long-term respiratory health of children living in polluted communities.
- Bronchitic symptoms are associated with exposure to nitrogen dioxide and the organic carbon fraction of PM2.5 in asthmatic children.
- Children exposed to higher levels of particulate matter, nitrogen dioxide, acid vapor and elemental carbon, had significantly lower lung function at age 18, an age when the lungs are nearly mature and lung function deficits are unlikely to be reversed.

Outdoor pollution monitoring tracked levels of ozone, nitrogen oxide, acid vapor and particulate matter over the 10-year study. In addition, limited indoor pollution measurements were taken at schools and in homes. Each spring, the lung function of each child was tested and annual questionnaires collected information about respiratory symptoms and diseases, physical activity, time spent outdoors, and factors such as parental smoking, and mold and pets in the household.

The 12 communities studied were: Atascadero in San Luis Obispo County; Lompoc and Santa Maria in Santa Barbara County; Lake Arrowhead and Upland in San Bernardino County; Lancaster, Long Beach and San Dimas in Los Angeles County; Lake Elsinore, Mira Loma and Riverside in Riverside County; and, Alpine in San Diego County.

The study has been funded by the California Air Resources Board (ARB) with other support from the U.S. Environmental Protection Agency, South Coast Air Quality Management District and other local air pollution control districts. Although the ARB funding support for the health portion of the study has concluded, the investigators have received a grant from the National Institute of Environmental Health Sciences to continue the program for an additional three years. The ARB will continue to work in collaboration with the CHS investigators through assistance with the monitoring network as they continue with this work.

A final report of the study is posted at (http://www.arb.ca.gov/research/abstracts/94-331.htm), and the Executive Summary is attached.

EPIDEMIOLOGIC INVESTIGATION TO IDENTIFY CHRONIC EFFECTS OF AMBIENT AIR POLLUTANTS IN SOUTHERN CALIFORNIA

Prepared for the California Air Resources Board and the California Environmental Protection Agency
Contract No. 94-331

Principal Investigator

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May 14, 2004

Abstract

A prospective study of about 6000 children living in 12 Southern California communities of varying ambient air pollution profiles was initiated in 1993. The primary purpose of the study was to determine whether air pollution causes chronic adverse respiratory health effects. Particulate matter (hourly PM_{10}, two-week-integrated $PM_{2.5}$, and several constituents including elemental and organic carbon, metals, and ions), ozone (O_3), nitrogen dioxide (NO_2), and acid vapor (primarily nitric) were measured in each community during the study period. Health outcomes assessed were annual pulmonary function tests (maximal spirometry), annual questionnaires on respiratory conditions and symptoms, and school absence monitoring. Demographics, housing characteristics, time-activity patterns and exposure to tobacco smoke were also assessed annually by written questionnaire. Study results indicated that children's lung function growth was adversely affected by air pollution, new cases of asthma and asthma exacerbations were associated with ambient air pollution levels, and school absences from acute respiratory illnesses followed rises in ozone levels. We conclude that current levels of ambient air pollution in Southern California are associated with clinically important chronic health effects that have substantial health and economic impacts. These findings indicate the need for cleaner air for our children to breathe.

1. Executive Summary

1.1. Background

Air pollution in Southern California continues to pose significant challenges to regulatory agencies and to health professionals. Several million persons living in the region are exposed to pollution levels that have been associated, in laboratory and field investigations, with acute and sub-acute respiratory effects. When the Children's Health Study (CHS) began in the early 1990s, it was known from laboratory observations that acute exposure to air pollutants produced decrements in pulmonary function, increased prevalence of respiratory symptoms, and respiratory tract inflammation. The paramount CHS research question has been whether *chronic* respiratory disease occurs as a result of breathing polluted ambient air.

In short-term exposure studies of humans in controlled exposure chambers, among common air pollutants, ozone shows the strongest evidence of adverse effects. Numerous laboratory exposure-response studies in human volunteers have shown that lung function losses, respiratory irritant symptoms, and increases in bronchial reactivity result from ozone exposure levels commonly observed in the South Coast Air Basin (SoCAB), either from comparatively brief (~1 hour) exercise at "alert" concentrations of 0.2 ppm and higher or from prolonged exercise at concentrations near the California ambient air quality standard of 0.09 ppm (US Environmental Protection Agency 1986; Folinsbee et al. 1988; Lippmann 1989; Lippmann 1991). Recovery to normal function levels typically takes several hours after ozone exposure ceases. Some effects of short-term exposure persist for more than 24 hours. At the time the study began, similar acute effects had not been seen from other pollutants at the levels encountered in Southern California [nitrogen oxides (NO_x), particulate matter less than 10 microns in diameter (PM_{10}) or acid vapors]. Since the study began, many hundreds of papers have been published demonstrating the relationship between pollutant levels and morbidity and mortality. This literature is well summarized by Brunekreef and Holgate (2002).

Studies of humans conducted in Southern California have suggested the possibility of chronic respiratory effects from air pollution (Detels et al. 1987; Abbey et al. 1991; Sherwin 1991; Sherwin and Richters 1991), but because of population attrition in the Detels studies, reliance on questionnaire data in the Abbey study, and possible confounding in the Sherwin study, conclusions are uncertain. When the Children's Health Study began, essentially no human data on children existed on chronic respiratory effects resulting from specific components of air pollution. The large number of persons in Southern California exposed to air pollution, the existing data on acute effects, and the available air monitoring data have provided a unique opportunity to examine chronic health effects resulting from air pollution in humans. The identification of health effects plus the generation of dose-response data provides regulators with highly valuable information for risk management.

Children were selected as the study population for several reasons: they often spend more time outdoors; they exercise more than adults; they do not smoke (at least the young ones); they do not have hazardous occupations; they are more likely to have spent their entire lives in Southern

California; their growing lungs may be more sensitive to the effects of air pollution and they are accessible in large numbers through schools.

1.2. Methods

Community selection was based on air pollution levels and exposure patterns plus demographic data of a group of census tracts in 86 communities. The basic principle governing the selection of communities was to select a group of communities having widely divergent exposure characteristics. A second principle we followed was that the communities being compared should be similar with respect to potential confounding variables. Following these principles, we selected 12 communities in 6 Southern California counties.

Participating study schools were selected based on: (1) location in a pre-selected community of interest based on air pollution levels and patterns; (2) sufficient population of target-aged children; (3) preponderance of children attending school from the immediate neighborhood; (4) demographic similarity with other potential and participating community school sites; (5) absence of localized air pollution sources such as close proximity to factories or freeways; and (6) proximal location to a fixed-site air monitoring station. The design approach specified child entry into the study at the fourth, seventh, and tenth grades and required the enrollment of at least four schools in each community (two elementary schools, a junior high school, and a senior high school).

Three cohorts were established in 1993; one with about 900 tenth grade students, another with about 900 seventh grade students, and still another with about 1800 fourth grade students. These cohorts are referred to in this report as cohorts A, B, and C. In 1996, about 2,000 additional fourth grade students were enrolled in the study. This cohort is referred to as cohort D. In each case, students who continued to reside in the twelve communities were evaluated annually through high school graduation (twelfth grade). Students in cohort D will graduate from high school in 2004. In this report, we report on data collected through high school graduation on cohorts A, B, and C. We also report on four years of follow-up data on cohort D.

The CHS written questionnaire was composed of several sections: demographics, a medical history, a housing survey, exposure to tobacco smoke, exposure to pets and pests, and a time-activity assessment. An extensive set of questions was asked about the history of respiratory diseases. These included asthma, bronchitis and pneumonia and associated symptoms such as cough, phlegm production and wheezing. The initial questionnaire collected information on the past history of these conditions and symptoms including frequency and time of onset. Asthma questions considered physician diagnosis, severity and medication use. Each annual follow-up questionnaire concentrated on adverse respiratory health experiences during the past year and allowed us to ascertain the incidence of new-onset conditions such as physician-diagnosed asthma and bronchitis.

Lung function testing took place in the spring of 1993 and in each subsequent spring to minimize seasonal confounding with intercurrent summer or winter acute air pollution episodes. The subjects were asked to perform at least 3 satisfactory maximal expiratory maneuvers. A maximum of 7 efforts were attempted. Six testing units (spirometers), operated by trained lung function technicians, were dispatched to conduct field-testing in a given community. Each

community was visited at least twice (at least one month apart) with half the participating subjects being tested each visit. The annual follow-up pulmonary function tests were planned to achieve as close to a 12-month interval between testing as possible. Heights and weights of the subjects were measured at the time of each lung testing.

The absence monitoring activity was designed to collect data to determine the frequency and severity of respiratory illnesses in relation to concurrent ambient air pollution levels and to compare respiratory disease patterns between communities and by exposure to various pollutants. Because schools were required by the State Department of Education to keep data on absences in order to receive capitation funding for students for most of the effective study period, there was motivation for schools to collect accurate data. We used documented school absences to trigger an investigation of the reason for the absence. This involved phoning the student's home to interview the parent or guardian. By this approach we were able to classify whether the illness was respiratory. We also asked whether the child had seen a doctor related to the reported absence, and if so, the doctor's diagnosis was noted. We asked about use of medications since this might provide an indication of the severity of the illness.

Monitoring stations were established in each of the twelve communities. This was accomplished by augmenting seven existing regional air monitoring stations and creating five new stations in late 1993 and early 1994. Continuous hourly measurements of ozone (O_3), nitrogen dioxide (NO_2), and PM_{10} were made at each station. Integrated measurements of particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) mass, PM chemical constituents, and acid vapors were made using a multi-legged two-week sampler (TWS) designed for the study (Hering et al. 1994; Lurmann et al. 1994). The PM chemical constituents included $PM_{2.5}$ sulfate, nitrate, and ammonium and PM_{10} elemental carbon (EC) and organic carbon (OC). The main carbon sampling leg did not have a size-selective inlet; however, testing indicated the particle size-cut was approximately 10 μm. A second carbon sampling leg was implemented in 2001 with a 2.2 μm size cut for comparison purposes. Throughout this report, references to $PM_{2.5}$ EC and OC concentrations refer to concentrations derived from the ~PM_{10} EC and OC measurements by application of suitable adjustment factors. The TWS also collected samples for determination of concentrations of nitric acid, hydrochloric acid, formic acid, and acetic acid (collectively described in this report as acid vapor). These measurements were made throughout the study period, 1994-2001. Additional measurements of carbon monoxide (CO), particle number (PN), $PM_{2.2}$ EC, $PM_{2.2}$ OC, and $PM_{2.2}$ elements by x-ray fluorescence (XRF) were implemented in most communities in 2000 and 2001. Also in 2001, the measured nitric oxide (NO) concentrations were retrospectively added to the database. Hourly temperature and relative humidity were measured at some of the CHS air monitoring stations for some of the years to complement the air quality data. These data were supplemented with meteorological data collected at locations near the CHS communities.

Information on usual time-activity profiles and household characteristics were collected annually for all CHS participants. These variables were used directly in health models as potential confounders or effect modifiers, and they were used indirectly in models of microenvironmental concentrations of O_3, PM_{10}, $PM_{2.5}$, and NO_2 in homes, schools, and vehicles to derive estimates of individual exposures to these pollutants. Traffic density data on freeways and major arterial roadways were combined with meteorological data, using line-source dispersion models, to

predict local pollution concentrations at all CHS participants' homes and all schools. These model-based predictions were supplemented by measurements of NO_2 concentrations during two 2-week periods in 287 homes across the 12 CHS communities.

Multi-level random effects models were used for the statistical analysis of the health outcome data in relation to air pollution and other risk factors. This approach provides a unified and valid way to assess associations at three levels of comparison: over years, between individuals, and between communities.

1.3. Results

Our findings demonstrated an association between breathing polluted air in Southern California and significant chronic deficits in lung function among adolescent children. We observed air pollution effects on lung function level at study entry (youngest cohort, age 10yrs), on 4-year lung function growth (age 10-14 years) in two independent cohorts, on 8-year lung function growth (age 10-18 years) in the original fourth grade cohort, and on the maximum rate of lung function growth during adolescence (over the study period). Air pollution exposure over the 8-year (from fourth grade to twelfth grade) study period was also linked to clinically significant deficits [forced expiratory volume in one second (FEV_1) below 80% predicted] in lung function at age 18 years. We found that there were three to five times more children with clinically significant deficits in lung function living in communities with high outdoor air pollution levels compared to communities with low pollution levels. In a subset of children who moved away from their original study community, we observed consistent associations of changes in lung function growth rates with corresponding changes in ambient air pollution exposure between their former and current communities of residence. The pollutants most closely associated with lung function deficits were NO_2, acids (either inorganic, organic, or a combination of the four acids monitored), PM_{10}, and $PM_{2.5}$. Several constituents of $PM_{2.5}$, including EC, nitrate, and ammonium, also showed associations with lung function growth. However, the inter-correlation among PM pollutants, and their high correlations with NO_2 and acid, limited our ability to distinguish the independent effects of any one of these pollutants.

Our findings demonstrated effects of air pollution on both new onset asthma and asthma exacerbations. Prior to the performance of the CHS, the prevailing scientific view was that air pollution made existing asthma worse but that it did not *cause* new cases to develop. Study data showed that new cases of asthma are much more likely to occur in high ozone communities, especially among those children who exercise regularly and at elevated levels. Additionally, our analyses regarding exposure to traffic-related air pollution have found associations between proximity to high traffic density (a marker for pollutant exposure) and increased risks for prevalent asthma among children.

We have demonstrated that air pollution is related to bronchitic symptoms and that asthmatics are more likely to be affected than non-asthmatics. Evaluation of the longitudinal data implicated NO_2 and organic carbon as being responsible for the observed effects.

Our results showed that short-term changes in O_3, but not NO_2 or PM_{10}, were associated with a substantial increase in school absences from both upper and lower respiratory illness. Absences were significantly increased 2 to 3 days after exposure and reached a peak on day 5 after

exposure. Because exposures at the levels observed in this study are common, the increase in school absenteeism from respiratory illnesses associated with relatively modest day-to day changes in O_3 concentration documents an important adverse impact of O_3 on children's health and well-being.

Our data also demonstrate an association between ozone levels and birth weight of children. High ozone levels during the second or third trimester of pregnancy are associated with lower birth weight. Other manuscripts resulting from this study have demonstrated the important health effects associated with maternal smoking, environmental tobacco smoke, genetics, obesity, and dietary factors.

1.4. Conclusions

Our main conclusion is that current levels of air pollution in Southern California are associated with several serious health effects that are costly to children's health and to the state. Lung function was found to be consistently associated with a package of highly correlated pollutants that include particulates, NO_2, and acids, but not ozone. This impact of vehicle-related pollution on children's lung function is likely to have life-long adverse health sequelae. The demonstration of strong evidence linking exposure to new cases of asthma (the most common chronic disease of childhood) to ozone is another striking association. It is also important to note that most of these associations extend to pollution levels below current ambient air standards and may exert significant health effects. Taken as a whole, the results from the Children's Health Study should provide scientific support for aggressive and accelerated efforts to achieve clean air for our children to breathe.

MEMO

TO: Energy and Environment Committee

FROM: Ted Harris, Associate Regional Planner, 213-236-1916, harrist@scag.ca.gov

DATE: October 7, 2004

SUBJECT: Air Quality Update

Recommended Action:

Information.

BACKGROUND

New transportation air quality conformity regulations, recently promulgated by the US Environmental Protection Agency (EPA), require SCAG to make a conformity determination on the 2004 Regional Transportation Plan and the 2004 Regional Transportation Improvement Program (RTIP) for the 8-hour ozone standard by June 15, 2005. Conformity determinations on the new fine particulate matter (PM2.5) standard are expected to be required by December 2005 or January 2006. These conformity determinations do not restart the three-year conformity clock for 2004 RTP and do not change the schedule of committed control measures, such as Transportation Control Measures (TCMs). The attached Powerpoint presentation outlines the process to meet these new transportation conformity standards.

Staff will continue to coordinate with the federal agencies to help ensure that the SCAG region adheres to these new regulations on schedule and to help improve air quality throughout Southern California.

Energy and Environment Committee

Air Quality Update

Ted Harris
Air Quality Program Lead
Southern California
Association of Governments

October 7, 2004

Overview of Transportation Conformity and New Standards

- Transportation conformity?
- 8-hour ozone standard
- Revocation of the 1-hour ozone standard
- $PM_{2.5}$ standard

What is transportation conformity?

- Established by the Federal Clean Air Act
- Requires evaluation of emissions from RTP and RTIP before they are approved
- Applies in ozone, CO, PM_{10}, $PM_{2.5}$ and NO_2 areas designated as nonattainment or maintenance

Connects air quality and transportation planning

The SIP (State Air Quality Plan)

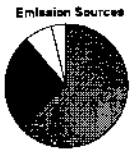
conformity

Transportation Plan, and Transportation Improvement Program (TIP)

Air Quality Update

What emission sources does transportation conformity address?

- Transportation conformity addresses air pollution from on-road mobile sources.
- On-road mobile sources are emissions created by cars, trucks, motorcycles, and buses.



Transportation Conformity...covers one piece of the pie...

Air Quality Update

Who determines conformity?

- **First: SCAG**
- **Second: US DOT (FHWA and FTA)**
  - **–approves SCAG's determination**

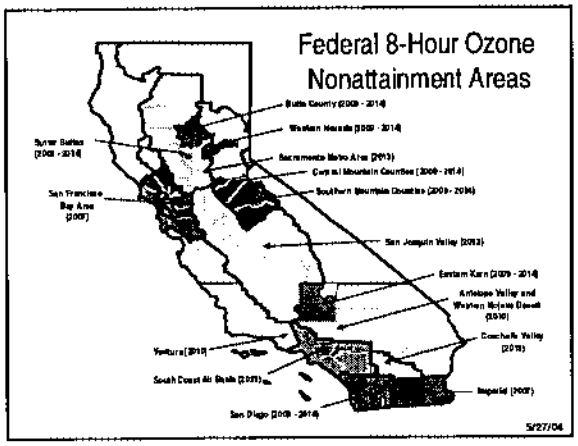
Air Quality Update

EPA's role in the process

- Interagency Consultation
- Approves/disapproves SIPs
- Determines if emission budgets are adequate
- Promulgates and interprets conformity regulations

New 8-hour ozone standard

- Same pollutant as 1-hour ozone standard
  - Reading over an 8-hour period rather than a 1-hour period
- Effective date of designation: June 15, 2004
- 8-hour conformity applies: June 15, 2005
  - FHWA must make a determination by 6/15/05
- EPA developing Phase 2 final rule now



Revocation of 1-hour ozone standard

- Effective June 15, 2005
- No 2010 SCAB attainment
- SIP control measures remain with same schedules
  - TCMs
  - Long-term measures
- However, approved 1-hour budgets apply for 8-hour until new AQMP/SIP in ~2007

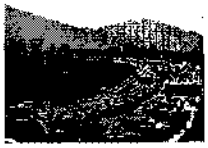
Process for 8-hour Conformity Determination

- Emissions analysis for new attainment years
  - Imperial County-2007
  - Coachella Valley-2013
  - SCAB-2021
- Interagency consultation
- Public participation
- Other work as needed
- FHWA approval

New PM2.5 standard

- $PM_{2.5}$ is a different pollutant than PM_{10}, not just a different standard
- EPA intends to designate areas by Nov/Dec 2004
  - Effective date Jan/Feb 2005
  - Conformity applies 1 year after effective date: Jan/Feb 2006
- Broader $PM_{2.5}$ implementation strategy rule under development

Transportation Sources of PM2.5



- Exhaust
- Brake and tire wear
- Re-entrained dust from paved and unpaved roads
- Construction dust from highway and transit construction
- $PM_{2.5}$ precursors
  - will be addressed in separate final rule before $PM_{2.5}$ designations are effective

Next Steps

- 8-hour ozone conformity
  - Emissions ananlysis
  - Interagency consultation
  - Public participation
  - Other work as needed
  - FHWA approval
- PM2.5 conformity process
  - EPA will designate in fall 2004